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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,216	10/23/2003	Raymond W. McCollum	MS306454.1/MSFTP518US	8223

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1900 EAST NINTH STREET  
CLEVELAND, OH 44114

EXAMINER
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NGUYEN BA, HOANG VU A

ART UNIT	PAPER NUMBER
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2192

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/692,216	MCCOLLUM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hoang-Vu A. Nguyen-Ba	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/10/06</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to the amendment filed December 19, 2005.
2. Claims 1-40 remain pending.

#### *Response to Amendments*

3. Per Applicants' request, Claims 1, 3, 17, 24, 25, 27, 33, 36, 38 and 40 have been amended.
4. The objection to the specification is withdrawn in view of Applicants' amendments to the specification to show the application no. of the provisional and co-pending applications.
5. The objection to Claims 3, 17, 18, 24, 25, 36 and 40 is withdrawn in view of Applicants' amendments to these claims to correct the identified minor informality.
6. The rejection of Claim 33 under 35 U.S.C. § 112, second paragraph is withdrawn in view of Applicants' amendment to this claim to correct a lack of antecedent basis of the identified term.
7. The provisional non-statutory double patenting rejection of Claims 1-40 as being unpatentable over U.S. Patent Application Nos. 10/692,432, 10/693,838 and 10/789,440 is withdrawn in view of Applicants' filing of a Terminal Disclaimer which has been approved by the Office.
8. The rejection of Claims 1-22, 24-25 and 36-37 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is withdrawn in view of Applicants' arguments and the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility (October 26, 2005). Claims 1, 24 and 36, which recite the limitation "a management service component that uses the description component during installation of the application or service to configure itself," appear to be for a practical application of an abstract idea which consists of transforming the

configuration of an application or service into a different configuration during the installation of the application/service.

*Response to Arguments*

9. Applicants' arguments during the telephone conversation on October 4, 2005 and Remarks filed December 19, 2005 regarding the rejection of Claims 1-17 and 21-40 under 35 U.S.C. § 102(b) as being anticipated by Ravindran and of Claims 18-20 under 35 U.S.C. § 103(a) as being unpatentable over Ravindran in view of Berners-Lee et al. ) "BL98") have been fully considered but they are not persuasive.

10. The following is an examiner's response to Applicants' arguments.

With respect to the 102(b) rejection of Claims 1-17 and 21-40 as being anticipated by Ravindran, Applicants essentially argued that Ravindran does not disclose "a description component that describes the application or service in terms of its constituent components" but merely discloses managing the system such that acceptable levels of QoS can be achieved independent of the application and underlying hardware platform.

The examiner respectfully disagrees with Applicants' assertion that Ravindran fails to disclose the above claimed feature. The examiner submits that Ravindran does disclose in section 7 a similar feature of Applicants' description component (e.g., specification of a subsystem) that has the same function of the description component which is describing the application/service in terms of its constituent components, and desired states in terms of at least one of functionality, configuration, system resources utilization, security and performance (e.g., "... The specification of a subsystem includes describing its name, relative priority, and the set of application program devices (sensors and actuation), and end-to-end tasks that constitute the

subsystem... ” and “The performance properties of the application ... are also described ... ” at p. 37).

Applicants further argued that it would appear that the system disclosed in Ravindran has the application *installed prior* to the system description language compiling the model and thus, Ravindran is silent with respect to using *the description component during installation of the application or service to configure itself*. In response to the Applicants’ argument, the examine respectfully notes that the term “installation” is defined as follows:

Installation is the process of putting a program in a computer system such that the program works as desired. It includes configuration. However, further configuration changes may be made once a program is installed. Ideally, such changes are made only if the demands on that program change.  
[en.wikipedia.org/wiki/Installation\\_\(computer\\_programs\)](http://en.wikipedia.org/wiki/Installation_(computer_programs)).

According to this definition, until an application or service works as desired, the installing process is considered not completed yet. In Ravindran, the system description language provides concrete abstractions to describe the architectural-level properties such as composition and interconnections of application software and hardware resources, its timeliness and survivability requirements as desired QoS (section 5). It should be noted that without these information the application has not worked as desired yet. Thus, Ravindran is not silent with respect to using the description component during installation of the application or service to configure itself as alleged by Applicants.

With respect to the rejection of Claims 18-20 under 35 U.S.C. § 103(a) as being unpatentable over Ravindran in view of BL98, Applicants essentially argued that BL98 does not make up for the aforementioned deficiencies of Ravindran with respect to independent Claim 1 which Claims 18-20 depend from, and as such, the subject invention as recited in Claims 18-20 is not obvious over the combination of Ravindran and BL98.

In response, the examiner notes that the application of BL98 in combination with Ravindran was not intended for curing the aforementioned deficiencies since Ravindran does indeed teach these deficiencies as discussed above but rather to render the features specifically claimed in Claims 18-20 obvious over the combination.

In view of the foregoing discussion, the rejections of Claims 1-40 under 35 U.S.C. § 102 and 35 U.S.C. § 103(a) are considered still proper and maintained.

*Claim Rejections – 35 U.S.C. § 102*

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-17 and 21-40 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ravindran, *Engineering Dynamic Real-Time Distributed Systems: Architecture, System Description Language, and Middleware*, January, 2002.

**Claims 1, 23 and 40**

Ravindran discloses at least:

*a description component that describes the application or service in terms of its constituent components, and desired states in terms of at least one of the functionality, configuration, system resources utilization, security and performance (see at least Abstract, Introduction, Section 7. System Description Language); and*

*a management service component that uses the description component during installation of the application or services to configure itself* (see at least Abstract, Introduction, Section 5. The Resource Management Architecture).

### **Claim 2**

Ravindran further discloses *the management service component ensures availability of the application through management actions that include at least one of configuration management, problem detection, diagnosis, and recovery* (see at least Introduction, p. 31, left column LC, end of 2<sup>nd</sup> ¶; Section 6.1).

### **Claim 3**

Ravindran further discloses *the description component comprises a models component that models one or more of the following: constituent components, health states and recovery, configuration settings, and administrative tasks* (see at least Introduction, p. 31, LC, 2<sup>nd</sup>, 4<sup>th</sup> ¶s; Sections 6.2, 7).

### **Claim 4**

Ravindran further discloses *the description component comprises a manifest component that contains information associated with models and source code attribution in a machine-readable form for use by the management service* (see at least Introduction; Section 7, p. 37, left and right columns LRC).

### **Claim 5**

Ravindran further discloses *the description component comprises a management component that comprises multiple services configured from information received from an application manifest* (see at least Introduction; Sections 5, 7).

### **Claim 6**

Ravindran further discloses *the description component comprises an administrative task component that includes administrative tasks defined in an application manifest* (see at least Introduction; Sections 5, 7).

### **Claim 7**

Ravindran further discloses *the description component comprises an attribution component that facilitates inserting attribution data in source code to indicate instrumentation and logic for monitoring aspects of the application* (see at least Introduction; Sections 5, 7).

### **Claim 8**

Ravindran further discloses *the description component comprises a management system component that uses the desired states expressed in a manifest* (see at least Introduction; Sections 5, 7).

### **Claim 9**

Ravindran further discloses *the management component uses the desired states as modified by an administrator* (see at least Section 5, p. 33, RC, 3<sup>rd</sup> ¶).

### **Claims 10, 28 and 39**

Ravindran further discloses *the desired states verify dependencies and install only necessary files, settings, and security data* (see at least § 5, 7).

### **Claims 11 and 39**

Ravindran further discloses *one or more of the desired states subscribes to events and forward the events according to a predetermined specification* (see at least § 5).



**Claims 12 and 30**

Ravindran further discloses *one or more of the desired states periodically collect at least one of instrumentation data and counter data* (see at least § 5).

**Claims 13 and 31**

Ravindran further discloses *one or more of the desired states perform automatic management tasks* (see at least § 5).

**Claims 14 and 32**

Ravindran does not specifically disclose *one or more of the desired states restrict access to program functions*. However, this feature is deemed inherent to Ravindran teachings of monitoring quality of service (QoS) (see at least § 5) for detecting components of tasks that are causing low QoS and of recovering from these low QoS. In order to recover from and subsequently prevent low QoS, access restriction to program functions, which would cause potential low QoS, must necessarily be implemented in Ravindran teachings.

**Claims 15 and 33**

Ravindran further discloses *one or more of the desired states perform at least one of detecting problems, diagnosing root causes, taking corrective action, and notifying an administrator when intervention is necessary* (see at least § 5, 6.1).

**Claims 16 and 34**

Ravindran further discloses *one or more of the desired states customize policy for use with a plurality of different computers* (see at least Introduction, first two ¶s).

**Claim 17**

Ravindran further discloses *a rules definition language (RDL) that enables defining a rule for monitoring availability of software and hardware components, the RDL facilitates at least one or more of the following: problem testing, diagnosis, resolution, verification, and notification* (see at least Introduction; Sections 5, 6.2, 7).

**Claim 21**

Ravindran further discloses *an attribution component that facilitates attribution of source code for monitoring health of the application* (see at least Section 7).

**Claim 22**

Ravindran further discloses *an attribution component that facilitates determining which parts of source code is used to determine and/or correct health, and when to execute monitoring rules* (see at least Section 7).

**Claims 24, 26 and 36**

Since Claims 24, 26 and 36 recite a combination of the same features of Claims 1a, 3, 4, 5, 6 and 8, the same rejections are thus applied.

**Claim 25**

Since Claim 25 recites a combination of the features of Claims 14, 15, 9, 11, 12, 10 and 13, the same rejections are thus applied.

### Claims 27 and 38

Since Claims 27 and 38 recite a combination of the same features of Claims 3, 7, 4, 5 and 8, the same rejections are thus applied.

### *Claim Rejections – 35 USC § 103*

13. The following is a quotation of the 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ravindran as applied to base Claim 1 and intervening Claims 8-9, in view of Berners-Lee et al. ("BL98"), Uniform Resource Identifiers (URI): Generic Syntax, August 1998.

### Claim 18

Ravindran does not specifically disclose *a uniform resource identifier (URI) employed to uniquely identify at least one or more of the following: an abstract resource, a physical resource, and a location of resources*. However, BL98 describes a "superset" of operations that can be applied to URI, which provides simple and extensible means for identifying a resource. BL98 thus defines a grammar that is a superset of all valid URI, such that an implementation can parse the common components of a URI reference without knowing the scheme-specific requirements of every possible identifier type (see at

least Abstract). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use BL98 in Ravindran for the purpose of facilitating the adaptability of application functionality to changes, adaptability that would be improved by the use of a generic URI syntax.

#### **Claim 19**

Ravindran does not specifically disclose *a URI template, which URI template allows a probe to be identified and characteristics of the probe understood without retrieving the probe*. However, BL98 describes a “superset” of operations that can be applied to URI, which provides simple and extensible means for identifying a resource. BL98 thus defines a grammar that is a superset of all valid URI, such that an implementation can parse the common components of a URI reference without knowing the scheme-specific requirements of every possible identifier type (see at least Abstract). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use BL98 in Ravindran for the purpose of facilitating the adaptability of application functionality to changes, adaptability that would be improved by the use of a generic URI syntax.

#### **Claim 20**

Ravindran does not specifically disclose *an instrumentation catalog that utilizes a URI template to describe instrumentation without referring to a specific instance*. However, BL98 describes a “superset” of operations that can be applied to URI, which provides simple and extensible means for identifying a resource. BL98 thus defines a grammar that is a superset of all valid URI, such that an implementation can parse the common components of a URI reference without knowing the scheme-specific requirements of every possible identifier type (see at least Abstract). It would have been obvious to a

person having ordinary skill in the art at the time the invention was made to use BL98 in Ravindran for the purpose of facilitating the adaptability of application functionality to changes, adaptability that would be improved by the use of a generic URI syntax.

*Conclusion*

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu “Antony” Nguyen-Ba whose telephone number is (571) 272-3701. The Examiner can normally be reached on Tuesday-Friday, 6:45 to 16:45.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner’s supervisor, Tuan Dam can be reached at (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Anthony Nguyen-Ba", with a long horizontal flourish extending to the right.

ANTONY NGUYEN-BA  
PRIMARY EXAMINER

ANTONY NGUYEN-BA  
PRIMARY EXAMINER

March 5, 2006